

# Award-Winning Science and Technology



Each year, the scientific and technological accomplishments of Livermore employees are recognized outside the Laboratory by prizes, awards, and front-page publicity. Some of these achievements are described here. In addition, in FY 2001, Laboratory scientists and engineers were responsible for 175 reported inventions, 112 patent applications, and 95 issued patents.

Edward Teller, one of the Laboratory's founders, was honored with the Hungarian Corvin Medal, bestowed by the Hungarian government for exceptional achievement in the arts and sciences. Delegates representing Hungarian Prime Minister Viktor Orban and the Hungarian consulates in San Mateo and Los Angeles read the proclamation in Hungarian. They were obviously pleased as Teller, who was born in Budapest in 1908, responded in his mother tongue. In the ceremony's opening remarks, given in both languages, the diplomats explained that Prime Minister Orban revived the Corvin Medal this year; it was last awarded in 1930.

The American Nuclear Society named laser and plasma physicist Mordy Rosen as the recipient of one of two Edward Teller Medals for 2001.

The laboratory garnered three R&D 100 Awards for:

- The Gene Recovery Microdissection Process headed by Matthew Coleman, Allen Christian, and James Tucker;
- The Continuous Laser Glass Melting Process by Paul Ehrmann, William Steele, Charles Thorsness, Michael Riley, Tayyab Suratwala, and Jack Campbell in partnership with Hoya Corporation USA and Schott Glass Technologies; and
- The Lasershot Marking System by Brent Dane, Lloyd Hackel, Hao-Lin Chen, John Halpin, and John Honig in partnership with Metal Improvement Company Inc.

Dave Cooper, former associate director for Computation, received DOE's highest civilian recognition, the Distinguished Associate Award, for his leadership of NNSA's ASCI program, the effort to simulate nuclear weapons performance with computer models.

The American Optical Society awarded a fellowship posthumously to longtime Livermore researcher Howard Powell for "seminal contributions to the research and development of high-energy, high-peak-power, and high-average-power solid-state lasers for inertial confinement fusion, military applications, and commercial utilization."

Clint Logan and Salvador Aceves were named fellows of the American Society of Mechanical Engineers.

Craig Smith, leader of Fission Energy and Systems Safety Program, was named an American Nuclear Society fellow for "outstanding accomplishments in nuclear

health, safety, and regulation and radiation protection and waste management."

Peter Beiersdorfer, David Munro, Karl van Bibber, and Siegfried Glenzer were named fellows of the American Physical Society.

Quazi Hossain was named a fellow by the American Society of Civil Engineers for distinguished service as chairman of the ASCE Working Committee on the High-Level Radioactive Waste Repository.

The U.S. Environmental Protection Agency's Greening the Government Award was given to Chemistry and Materials Science directorate's Space Action Team for work in recycling materials in Livermore decontamination and demolition projects.

The Boeing Award for Infrared Spectrometry was given to a Laboratory team for the Remote Optical Characterization Sensor Suite (ROCSS), based on the Laboratory's unique capabilities in infrared spectrometry.

Eli Rotenbert received the Peter Mark Memorial Award of the American Vacuum Society for furthering knowledge of nanophase and reduced dimensionality systems by creative use of angle-resolved photoemission.

John Elmer and Joe Wong received the William Spraragen Memorial Award from the American Welding Society for valuable contributions in welding research and advancement of the welding industry.

Brendan Dooher was the first Laboratory employee to be selected for a National Academy of Engineering Fellowship.

The Medical Technology Program—including Stephen Lane, Tom Peyser, Chris Darrow, Natasha Zaitseva, Joe Satcher, and Doug Cary—and the Industrial Partnerships and Commercialization Office's Kevin O'Brien and Connie Pitcock received DOE's Bright Light Award and a Federal Laboratory Consortium Excellence in Technology Transfer Award for collaborations and transferring glucose monitoring technology to MiniMed Inc. of Sylmar, California.

DOE/Oakland Operations Pollution Prevention Awards were given for five projects: specific-depth groundwater sampling (Greg Howard), take-back buy-back of AVLIS chemicals and materials (Edward Fehring), NIF optics cleaning process (the NIF design team), reducing hazardous waste and emissions (the Fleet Maintenance Facility), and reducing waste at the Site 300 firing tables (Defense and Nuclear Technologies staff).

Claire Max, Elbert Branscomb, John Nitao, and George Kwei earned Edward Teller Fellowships for 2001. Edward Teller awards are presented by the Laboratory director for significant accomplishments.

The Laboratory was awarded a DOE Technology Innovation Award for work developing a hydrogen fuel tank for next-generation automobiles.